

WHAT IS CLAIMED IS

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1. A method of minimizing interference from wireless handset components which interferes with the receipt of GPS signals by a GPS receiver located at the handset in which the wireless phone has a motherboard, comprising the steps of:

spacing the GPS receiver from the phone motherboard; and,  
providing shielding between the GPS receiver and the motherboard.

2. The method of Claim 1, wherein the motherboard has ground plane and further including the step of electrically connecting the shielding to the ground plane of the motherboard.

3. The method of Claim 2, and further including the step of mechanically connecting the shielding to the ground plane of the motherboard.

4. The method of Claim 1, wherein the shielding includes zinc.

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5. The method of Claim 1, and further including the step of providing a physical barrier between the GPS receiver and the motherboard, the barrier having an electrically conductive coating thereon.

6. The method of Claim 5, wherein the coating includes zinc.

7. The method of Claim 2, wherein the GPS receiver has a system ground and further including the step of electrically connecting the shielding to the system ground of the GPS receiver.

8. The method of Claim 1, wherein the handset has a housing and wherein the housing includes a pod for carrying the GPS receiver and further including the steps of providing the walls of the pod with shielding.

9. The method of Claim 8, wherein the pod-carried shielding forms a Faraday cage about the GPS receiver.

10. The method of Claim 1, wherein the wireless handset carries a patch type GPS antenna with a ground plane and a GPS output connector and further including the step of providing shielding around the output connector.

11. The method of Claim 10, and further including providing heavily shielded coaxial cable between the output connector and the GPS receiver.

12. The method of Claim 11, wherein the heavy shielding is provided by semi-rigid coaxial cable.

13. The method of Claim 10, wherein the GPS antenna includes a filter coupled to the output connection to filter out components to either side of the GPS antenna frequency.

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14. The method of Claim 15, wherein the GPS antenna includes a low noise amplifier for amplifying the signal from the GPS antenna to compensate for losses due to the insertion of the filter.

15. A system for providing a GPS receiver in a wireless handset such that interference between the components of the handset and the GPS receiver is minimized to a sufficient extent to permit robust receipt of signals by the GPS receiver from GPS satellites, comprising:

- a wireless handset housing;
- a phone motherboard located within said housing;
- a GPS receiver spaced from one side of said phone motherboard; and,
- shielding interposed between said GPS receiver and said motherboard.

16. The system of Claim 15, wherein said housing includes a bulkhead between said phone motherboard and said GPS receiver and wherein said bulkhead has said shielding affixed thereto.

17. The system of Claim 16, wherein said shielding is in the form of a conductive layer on said bulkhead.

18. The system of Claim 15, wherein said shielding includes zinc.

19. The system of Claim 15, wherein said phone motherboard has a ground layer and wherein said shielding is electrically connected to said ground layer.

20. The system of Claim 15, wherein said GPS receiver has a system ground and wherein said shielding is electrically connected to said system ground.

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